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seat deterioration in accordance with paragraph (d)(1) of this section.

- (h) Training. The track owner shall provide annual training in handling rail seat deterioration exceptions to all persons designated as fully qualified under §213.7 and whose territories are subject to the requirements of §213.234. At a minimum, the training shall address the following:
- (1) Interpretation and handling of the exception reports generated by the automated inspection measurement system;
- (2) Locating and verifying exceptions in the field and required remedial action; and
  - (3) Recordkeeping requirements.

[76 FR 18086, Apr. 1, 2011, as amended at 76 FR 55825, Sept. 9, 2011]

# § 213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.

- (a) Except as provided in paragraph (c) of this section, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot at least monthly.
- (b) Each switch in Classes 3 through 5 track that is held in position only by the operating mechanism and one connecting rod shall be operated to all of its positions during one inspection in every 3 month period.
- (c) In the case of track that is used less than once a month, each switch, turnout, track crossing, and moveable bridge lift rail assembly or other transition device shall be inspected on foot before it is used.

## §213.237 Inspection of rail.

(a) In addition to the inspections required by §213.233, each track owner shall conduct internal rail inspections sufficient to maintain service failure rates per rail inspection segment in accordance with this paragraph (a) for a 12-month period, as determined by the track owner and calculated within 45 days of the end of the period. These rates shall not include service failures that occur in rail that has been replaced through rail relay since the time of the service failure. Rail used to repair a service failure defect is not

considered relayed rail. The service failure rates shall not exceed—

- (1) 0.1 service failure per year per mile of track for all Class 4 and 5 track:
- (2) 0.09 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains or is a hazardous materials route; and
- (3) 0.08 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains and is a hazardous materials route.
- (b) Each rail inspection segment shall be designated by the track owner no later than March 25, 2014 for track that is Class 4 or 5 track, or Class 3 track that carries regularly-scheduled passenger trains or is a hazardous materials route and is used to determine the milepost limits for the individual rail inspection frequency.
- (1) To change the designation of a rail inspection segment or to establish a new segment pursuant to this section, a track owner must submit a detailed request to the FRA Associate Administrator for Railroad Safety/Chief Safety Officer (Associate Administrator). Within 30 days of receipt of the submission, FRA will review the request. FRA will approve, disapprove, or conditionally approve the submitted request, and will provide written notice of its determination.
- (2) The track owner's existing designation shall remain in effect until the track owner's new designation is approved or conditionally approved by FRA.
- (3) The track owner shall, upon receipt of FRA's approval or conditional approval, establish the designation's effective date. The track owner shall advise in writing FRA and all affected railroad employees of the effective date.
- (c) Internal rail inspections on Class 4 and 5 track, or Class 3 track with regularly-scheduled passenger trains or that is a hazardous materials route, shall not exceed a time interval of 370 days between inspections or a tonnage interval of 30 million gross tons (mgt) between inspections, whichever is shorter. Internal rail inspections on Class 3 track that is without regularly-

scheduled passenger trains and not a hazardous materials route must be inspected at least once each calendar year, with no more than 18 months between inspections, or at least once every 30 mgt, whichever interval is longer, but in no case may inspections be more than 5 years apart.

- (1) Any rail used as a replacement plug rail in track that is required to be tested in accordance with this section must have been tested for internal rail flaws.
- (2) The track owner must verify that any plug rail installed after March 25, 2014 has not accumulated more than a total of 30 mgt in previous and new locations since its last internal rail flaw test, before the next test on the rail required by this section is performed.
- (3) If plug rail not in compliance with this paragraph (c) is in use after March 25, 2014, trains over that rail must not exceed Class 2 speeds until the rail is tested in accordance with this section.
- (d) If the service failure rate target identified in paragraph (a) of this section is not achieved, the track owner must inform FRA of this fact within 45 days of the end of the defined 12-month period in which the performance target is exceeded. In addition, the track owner may provide to FRA an explanation as to why the performance target was not achieved and provide a remedial action plan.
- (1) If the performance target rate is not met for two consecutive years, then for the area where the greatest number of service failures is occurring, either:
- (i) The inspection tonnage interval between tests must be reduced to 10 mgt; or
- (ii) The class of track must be reduced to Class 2 until the target service failure rate is achieved.
- (2) In cases where a single service failure would cause the rate to exceed the applicable service failure rate as designated in paragraph (a) of this section, the service failure rate will be considered to comply with paragraph (a) of this section unless a second such failure occurs within a designated 12-month period. For the purposes of this paragraph (d)(2), a period begins no earlier than January 24, 2014.

- (e) Each defective rail shall be marked with a highly visible marking on both sides of the web and base except that, where a side or sides of the web and base are inaccessible because of permanent features, the highly visible marking may be placed on or next to the head of the rail.
- (f) Inspection equipment shall be capable of detecting defects between joint bars, in the area enclosed by joint bars.
- (g) If the person assigned to operate the rail defect detection equipment (i.e., the qualified operator) determines that a valid search for internal defects could not be made over a particular length of track, that particular length of track may not be considered as internally inspected under paragraphs (a) and (c) of this section.
- (h) If a valid search for internal defects could not be conducted, the track owner shall, before expiration of the time or tonnage limits in paragraph (a) or (c) of this section—
- (1) Conduct a valid search for internal defects;
- (2) Reduce operating speed to a maximum of 25 m.p.h. until such time as a valid search can be made: or
- (3) Replace the rail that had not been inspected.
- (i) The person assigned to operate the rail defect detection equipment must be a qualified operator as defined in §213.238 and have demonstrated proficiency in the rail flaw detection process for each type of equipment the operator is assigned.
  - (j) As used in this section—
- (1) Hazardous materials route means track over which a minimum of 10,000 car loads or intermodal portable tank car loads of hazardous materials as defined in 49 CFR 171.8 travel over a period of one calendar year; or track over which a minimum of 4,000 car loads or intermodal portable tank car loads of the hazardous materials specified in 49 CFR 172.820 travel, in a period of one calendar year.
- (2) Plug rail means a length of rail that has been removed from one track location and stored for future use as a replacement rail at another location.

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- (3) Service failure means a broken rail occurrence, the cause of which is determined to be a compound fissure, transverse fissure, detail fracture, or vertical split head.
- (4) Valid search means a continuous inspection for internal rail defects where the equipment performs as intended and equipment responses are interpreted by a qualified operator as defined in §213.238.

[79 FR 4258, Jan. 24, 2014]

#### §213.238 Qualified operator.

- (a) Each provider of rail flaw detection shall have a documented training program in place and shall identify the types of rail flaw detection equipment for which each equipment operator it employs has received training and is qualified. A provider of rail flaw detection may be the track owner. A track owner shall not utilize a provider of rail flaw detection that fails to comply with the requirements of this paragraph.
- (b) A qualified operator shall be trained and have written authorization from his or her employer to:
- (1) Conduct a valid search for internal rail defects utilizing the specific type(s) of equipment for which he or she is authorized and qualified to operate:
- (2) Determine that such equipment is performing as intended;
- (3) Interpret equipment responses and institute appropriate action in accordance with the employer's procedures and instructions; and
- (4) Determine that each valid search for an internal rail defect is continuous throughout the area inspected and has not been compromised due to environmental contamination, rail conditions, or equipment malfunction.
- (c) To be qualified, the operator must have received training in accordance with the documented training program and a minimum of 160 hours of rail flaw detection experience under direct supervision of a qualified operator or rail flaw detection equipment manufacturer's representative, or some combination of both. The operator must demonstrate proficiency in the rail defect detection process, including the equipment to be utilized, prior to initial

qualification and authorization by the employer for each type of equipment.

- (d) Each employer shall reevaluate the qualifications of, and administer any necessary recurrent training for, the operator as determined by and in accordance with the employer's documented program. The reevaluation process shall require that the employee successfully complete a recorded examination and demonstrate proficiency to the employer on the specific equipment type(s) to be operated. Proficiency may be determined by a periodic review of test data submitted by the operator.
- (e) Each employer of a qualified operator shall maintain written or electronic records of each qualification in effect. Each record shall include the name of the employee, the equipment to which the qualification applies, date of qualification, and date of the most recent reevaluation, if any.
- (f) Any employee who has demonstrated proficiency in the operation of rail flaw detection equipment prior to January 24, 2014, is deemed a qualified operator, regardless of the previous training program under which the employee was qualified. Such an operator shall be subject to paragraph (d) of this section.
- (g) Records concerning the qualification of operators, including copies of equipment-specific training programs and materials, recorded examinations, demonstrated proficiency records, and authorization records, shall be kept at a location designated by the employer and available for inspection and copying by FRA during regular business hours.

[79 FR 4259, Jan. 24, 2014]

## §213.239 Special inspections.

In the event of fire, flood, severe storm, or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track.

## §213.241 Inspection records.

(a) Each owner of track to which this part applies shall keep a record of each inspection required to be performed on that track under this subpart.